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* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	FEB 28	PATDPAFULL - New display fields provide for legal status data from INPADOC
NEWS	4	FEB 28	BABS - Current-awareness alerts (SDIs) available
NEWS	5	MAR 02	GBFULL: New full-text patent database on STN
NEWS	6	MAR 03	REGISTRY/ZREGISTRY - Sequence annotations enhanced
NEWS	7	MAR 03	MEDLINE file segment of TOXCENTER reloaded
NEWS	8	MAR 22	KOREAPAT now updated monthly; patent information enhanced
NEWS	9	MAR 22	Original IDE display format returns to REGISTRY/ZREGISTRY
NEWS	10	MAR 22	PATDPASPC - New patent database available
NEWS	11	MAR 22	REGISTRY/ZREGISTRY enhanced with experimental property tags
NEWS	12	APR 04	EPFULL enhanced with additional patent information and new fields
NEWS	13	APR 04	EMBASE - Database reloaded and enhanced
NEWS	14	APR 18	New CAS Information Use Policies available online
NEWS	15	APR 25	Patent searching, including current-awareness alerts (SDIs), based on application date in CA/CAPLUS and USPATFULL/USPAT2 may be affected by a change in filing date for U.S. applications.
NEWS	16	APR 28	Improved searching of U.S. Patent Classifications for U.S. patent records in CA/CAPLUS
NEWS	17	MAY 23	GBFULL enhanced with patent drawing images
NEWS	18	MAY 23	REGISTRY has been enhanced with source information from CHEMCATS
NEWS	19	JUN 06	The Analysis Edition of STN Express with Discover! (Version 8.0 for Windows) now available
NEWS	20	JUN 13	RUSSIAPAT: New full-text patent database on STN
NEWS	21	JUN 13	FRFULL enhanced with patent drawing images
NEWS	22	JUN 27	MARPAT displays enhanced with expanded G-group definitions and text labels
NEWS	23	JUL 01	MEDICONF removed from STN
NEWS	24	JUL 07	STN Patent Forums to be held in July 2005
NEWS	25	JUL 13	SCISEARCH reloaded
NEWS	26	JUL 20	Powerful new interactive analysis and visualization software, STN AnaVist, now available
NEWS	27	AUG 11	Derwent World Patents Index(R) web-based training during August
NEWS	28	AUG 11	STN AnaVist workshops to be held in North America
NEWS EXPRESS			JUNE 13 CURRENT WINDOWS VERSION IS V8.0, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 13 JUNE 2005
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS INTER			General Internet Information
NEWS LOGIN			Welcome Banner and News Items
NEWS PHONE			Direct Dial and Telecommunication Network Access to STN
NEWS WWW			CAS World Wide Web Site (general information)

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 12:33:08 ON 24 AUG 2005

=> file agricola caplus biosis

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'AGRICOLA' ENTERED AT 12:33:43 ON 24 AUG 2005

FILE 'CAPLUS' ENTERED AT 12:33:43 ON 24 AUG 2005

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FILE 'BIOSIS' ENTERED AT 12:33:43 ON 24 AUG 2005

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=> s seed specific or seed preferred

L1 1272 SEED SPECIFIC OR SEED PREFERRED

=> s l1 and promoter

L2 723 L1 AND PROMOTER

=> s l2 and arabidiopsis

L3 0 L2 AND ARABIDIOPSIS

=> s l2 and arabidopsis

L4 219 L2 AND ARABIDOPSIS

=> s l4 and (isolated or purified)

L5 46 L4 AND (ISOLATED OR PURIFIED)

=> dup rem l5

PROCESSING COMPLETED FOR L5

L6 30 DUP REM L5 (16 DUPLICATES REMOVED)

=> d 1-10 ti

L6 ANSWER 1 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN

TI Cloning and sequences of fungal Δ -15 desaturases suitable for production of polyunsaturated fatty acids in oleaginous plants and yeast

L6 ANSWER 2 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN

TI Trans-2-enoyl-CoA reductase gene of *Euglena gracilis* and its use for production of lipids and oil content in transgenic plants

L6 ANSWER 3 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN

TI A new seed-based assay for meiotic recombination in *Arabidopsis thaliana*

L6 ANSWER 4 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN

TI DNA and protein sequences of grape 2S albumin gene and uses of its promoter in expressing protein in transgenic plants

L6 ANSWER 5 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1

TI Seed-specific heterologous expression of a nasturtium FAE gene in *Arabidopsis* results in a dramatic increase in the proportion of erucic acid

L6 ANSWER 6 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2

TI Interaction of PVALF and VP1 B3 domains with the β -phaseolin

promoter

- L6 ANSWER 7 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
TI Protein and cDNA sequences for homogentisic acid geranylgeranyl transferase (HGGT) from barley, wheat, rice, and corn, and related compositions and methods for altering tocotrienol content
- L6 ANSWER 8 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
TI **Seed-specific** USP promoters for expressing genes in plants
- L6 ANSWER 9 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
TI Methods of modifying plant growth and development by targeted expression of cell cycle control protein Cdc25
- L6 ANSWER 10 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 3
TI $\Delta 12$ -Oleate Desaturase-related Enzymes Associated with Formation of Conjugated trans- $\Delta 11$, cis- $\Delta 13$ Double Bonds

=> d 6 ab

- L6 ANSWER 6 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2
AB The phas **promoter** is potentially transcribed during embryogenesis but in vegetative tissues it is completely silenced by a rotationally positioned nucleosome. Ectopic expression in leaves of PvALF, a **seed-specific** transcription factor belonging to the plant-exclusive B3 domain-containing VP1/ABI3 family, leads to chromatin remodeling of the phas **promoter**, permitting transcriptional activation by the growth regulator abscisic acid (ABA). Specific interaction with RY elements present in 40-42 bp oligonucleotide probes has been shown in vitro for *Arabidopsis* ABI3 and the isolated B3 domain of maize VP1. Here, both in vivo and in vitro approaches were used to show phys. interaction of the B3 domain of VP1 or PvALF to RY elements in the native phas **promoter**. In electrophoretic mobility shift assays, small changes in B3 domain concentration differentiated between RY element-specific and sequence non-specific DNA binding. Increased affinity of the PvALF B3 domain to RY elements was observed in the presence of histones and other basic proteins, possibly reflecting the ability of this B3 factor to interact with the phas **promoter** in its nucleosomal configuration.

=> d 6 so

- L6 ANSWER 6 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2
SO Plant Molecular Biology (2004), 55(2), 221-237
CODEN: PMBIDB; ISSN: 0167-4412

=> d 8 so

- L6 ANSWER 8 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
SO U.S. Pat. Appl. Publ., 52 pp.
CODEN: USXXCO

=> d 8 pi

- L6 ANSWER 8 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
- | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| US 2003229918 | A1 | 20031211 | US 2003-429516 | 20030505 |
| CA 2483544 | AA | 20031113 | CA 2003-2483544 | 20030505 |
| WO 2003092362 | A2 | 20031113 | WO 2003-US13848 | 20030505 |
| WO 2003092362 | A3 | 20040401 | | |
- W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
 PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
 TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 EP 1504096 A2 20050209 EP 2003-724423 20030505
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

=> d 11-20 ti

- L6 ANSWER 11 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Starch synthase from *Canna edulis*, its protein and cDNA sequence and their use in the production of new starches
- L6 ANSWER 12 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 4
 TI Cotton α -Globulin Promoter: Isolation and Functional Characterization in Transgenic Cotton, *Arabidopsis*, and Tobacco
- L6 ANSWER 13 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Identification of SnIP1, a novel protein that interacts with SNF1-related protein kinase (SnRK1)
- L6 ANSWER 14 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
 TI *Arabidopsis* KNAT411 gene promoter and its use for seed-specific gene expression in transgenic plants
- L6 ANSWER 15 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Isolation of thioredoxin H homologs and their use in food processing
- L6 ANSWER 16 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Cloning the promoter of BcNA 1 from *Brassica napus* and Fad2 gene from *Arabidopsis thaliana* and construction of the plant expression vector
- L6 ANSWER 17 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Manipulation of the CYP84 subfamily of cytochrome P450-dependent monooxygenase genes in *Brassica napus* to improve seed meal quality.
- L6 ANSWER 18 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Targetting foreign proteins manufactured in plant cells to oil bodies using targetting sequences from oleosins
- L6 ANSWER 19 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 5
 TI Regulation and evolution of seed globulin genes
- L6 ANSWER 20 OF 30 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN DUPLICATE 6
 TI A bifunctional oleate 12-hydroxylase: desaturase from *Lesquerella fendleri*.

=> d 14 so

- L6 ANSWER 14 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
 SO PCT Int. Appl., 71 pp.
 CODEN: PIXXD2

=> d 14 pi

- L6 ANSWER 14 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
 PATENT NO. KIND DATE APPLICATION NO. DATE

PI	WO 2000068388	A1	20001116	WO 2000-EP4879	20000505
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6342657	B1	20020129	US 1999-306060	19990506
	CA 2370027	AA	20001116	CA 2000-2370027	20000505
	EP 1177300	A1	20020206	EP 2000-931269	20000505
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	AU 781017	B2	20050428	AU 2000-49255	20000505

=> d 14 ab

L6 ANSWER 14 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
AB The present invention is directed to **isolated promoter** sequences from **seed-specific** genes, such as KNAT411 .
When operably linked to either the coding sequence of a heterologous gene or a sequence complementary to a native plant gene, the subject promoters direct expression of the coding sequence or complementary sequence in a plant seed, including the early embryo. The **promoter** sequences are useful in expression cassettes and expression vectors for the transformation of plants. Also provided are methods of directing **seed-specific** expression of a gene or sequence complementary to a native plant gene by introducing into a plant cell an **isolated** nucleic acid comprising a subject **promoter** operably linked to said gene or complementary sequence. Methods for activating a site-specific recombination system in the early embryo of a seed by transforming a plant with an expression cassette comprising a subject **promoter** operably linked to a recombinase gene are also provided. Thus, the *A. thaliana* KNAT411 gene **promoter** was cloned and sequenced. This gene was found to be active very early in embryogenesis, much earlier than other known **seed-specific** promoters. Southern anal. indicated that there was only one KNAT411 gene, but there were several KNAT411-like sequences in the *A. thaliana* genome. The KNAT411 gene was determined to have five exons separated by four introns. The observed position of the third intron (inside the ELK domain) and of the fourth intron (interrupting the homeodomain) is characteristic of knotted genes.

=> d 16 ab

L6 ANSWER 16 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
AB The upstream regulatory region of a **seed-specific** gene was **isolated** from the genomic DNA of *Brassica napus* by PCR amplification. The cloned fragment contained 1755 nucleotides, and shared a sequence homol. of 99.6% with the reported data. The coding region of oleic acid desaturase gene was then cloned from *Arabidopsis thaliana*. The sequencing anal. indicated that the sequence of the PCR product was just the same as reported before. In addition, the plant expression vector harboring the **seed-specific promoter** and trans-Fad2 gene was constructed.

=> d 16 so

L6 ANSWER 16 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
SO High Technology Letters (2000), 6(1), 81-88
CODEN: HTLEFC; ISSN: 1006-6748

=> d 18 ab

L6 ANSWER 18 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
 AB Genes for oleosins and other proteins of the oil body of plants are cloned and methods of using peptides of the proteins to direct foreign proteins to the oil body are described. Incorporation of a protein into the oil body greatly simplifies its purification from the host organism. Proteins including, but not limited to: seed storage proteins, enzymes, bioactive peptides, and antibodies can be prepared and purified in this manner. The invention can also be modified to recover oil body protein fusion products from non-plant host cells. These oil body-associated proteins can be released during seed germination to afford protection of seedlings from pathogens. Finally, the persistent association of oil body proteins with the oil body can be further utilized to develop a biol. means to create novel immobilized enzymes useful for bioconversion of substrates. Use of the oleosin gene and promoter to direct synthesis of a β -glucuronidase fusion protein with incorporation of the fusion protein into the oil body is demonstrated. The enzyme could be released from the oil body by cleavage with thrombin.

=> d 18 so

L6 ANSWER 18 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
 SO U.S., 48 pp., Cont.-in-part of U.S. 5,650,554.
 CODEN: USXXAM

=> d 18 pi

L6	ANSWER 18 OF 30	CAPLUS	COPYRIGHT 2005 ACS on STN		
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5948682	A	19990907	US 1997-846021	19970425
	US 5650554	A	19970722	US 1994-366783	19941230
	US 6288304	B1	20010911	US 1998-210843	19981218
	US 2002100073	A1	20020725	US 2001-887569	20010625
	US 2003126631	A1	20030703	US 2001-893525	20010629
	US 6753167	B2	20040622		
	US 2002088025	A1	20020704	US 2001-897425	20010703
	US 6750046	B2	20040615		
	US 2003177537	A1	20030918	US 2002-324131	20021220
	US 2004205844	A1	20041014	US 2004-763380	20040126
	JP 2005013236	A2	20050120	JP 2004-266023	20040913

=> d 19 ab

L6 ANSWER 19 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 5
 AB The expression of seed protein genes is precisely regulated in a tissue-specific and development dependent manner mainly as the result of specific interactions between trans-acting factors and corresponding cis-elements. The RY element CATGCATG is one of the best known cis-motifs found in the promoters of many seed specific genes. The expression anal. of in vitro generated promoter mutants suggests that mainly the actual nucleotide sequence and not the RY character itself is essential for the function of the motif as a pos. acting element of the legumin gene promoter. Southwestern screening of a cotyledon specific expression library resulted in the isolation of several seed promoter binding factors representing new members of the Zn-finger-, bZIP-, RING-, and HMG-families. One factor isolated both from Vicia faba and Arabidopsis thaliana contains a typical repeat pattern of amino acids and might represent a novel class of DNA binding factors. Embryos of the conditionally embryo lethal fus3 mutant of Arabidopsis thaliana fail to acquire dormancy and desiccation tolerance. The activity of several seed specific gene promoters depends on an intact FUS3 gene product. Using transient expression assays in isolated protoplasts the authors demonstrate that the FUS3 gene product strongly induces the activity of seed gene promoters. The destruction of the RY motif reduces

this inducibility, suggesting that the RY motif is an essential target of the FUS3 pathway. Based on extensive comparisons of globulin genes the authors suggest that seed globulins of the legumin and vicilin type are members of a large superfamily of structurally related, functionally distinct proteins and have been recruited from a group of ancient proteins functional in basic cellular desiccation/hydration processes.

=> d 19 so

L6 ANSWER 19 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 5
SO Journal of Plant Physiology (1998), 152(6), 600-606
CODEN: JPPHEY; ISSN: 0176-1617

=> d 21-30 ti

L6 ANSWER 21 OF 30 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
STN
TI Seed-specific promoter region.

L6 ANSWER 22 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 7
TI Effects of seed-specific expression of a cytokinin
biosynthetic gene on canola and tobacco phenotypes

L6 ANSWER 23 OF 30 AGRICOLA Compiled and distributed by the National
Agricultural Library of the Department of Agriculture of the United States
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(2005) on STN
TI Production of biologically active hirudin in plant seeds using oleosin
partitioning.

L6 ANSWER 24 OF 30 AGRICOLA Compiled and distributed by the National
Agricultural Library of the Department of Agriculture of the United States
of America. It contains copyrighted materials. All rights reserved.
(2005) on STN DUPLICATE 8
TI Expression of DC8 is associated with, but not dependent on embryogenesis
[Errata: Sept 1996, v. 31 (6), p. 1239; Aug 1997, v. 34 (6), p. 974.]

L6 ANSWER 25 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 9
TI Production of biologically active hirudin in plant seeds using oleosin
partitioning

L6 ANSWER 26 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 10
TI ABA-regulated promoter activity in stomatal guard cells

L6 ANSWER 27 OF 30 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
STN
TI THE ISOLATION AND FUNCTIONAL CHARACTERISATION OF A BRASSICA-NAPUS ACYL
CARRIER PROTEIN 5' FLANKING REGION INVOLVED IN THE REGULATION OF SEED
STORAGE LIPID SYNTHESIS.

L6 ANSWER 28 OF 30 AGRICOLA Compiled and distributed by the National
Agricultural Library of the Department of Agriculture of the United States
of America. It contains copyrighted materials. All rights reserved.
(2005) on STN DUPLICATE 11
TI A novel seed protein gene from Vicia faba is developmentally regulated in
transgenic tobacco and Arabidopsis plants.

L6 ANSWER 29 OF 30 AGRICOLA Compiled and distributed by the National
Agricultural Library of the Department of Agriculture of the United States
of America. It contains copyrighted materials. All rights reserved.
(2005) on STN DUPLICATE 12
TI Upstream sequences regulating legumin gene expression in heterologous
transgenic plants.

L6 ANSWER 30 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN
TI A process for the production of biologically active peptide via the
expression of modified storage seed protein genes in transgenic plants

=> d 21 ab

L6 ANSWER 21 OF 30 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
STN

=> d 21 so

L6 ANSWER 21 OF 30 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
STN

SO Official Gazette of the United States Patent and Trademark Office Patents,
(April 22, 1997) Vol. 1197, No. 4, pp. 2626. print.
CODEN: OGUPE7. ISSN: 0098-1133.

=> d 22 ab

L6 ANSWER 22 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 7

AB The *Agrobacterium tumefaciens* isopentenyl transferase gene (*ipt*), a cytokinin biosynthetic gene, was placed under the control of 1.9 kb of promoter sequence from the 2S albumin AT2S1 gene isolated from an *Arabidopsis thaliana* library. The construct was introduced into canola (*Brassica napus*) and tobacco (*Nicotiana tabacum*). *Ipt* transcripts were followed during embryo development of transgenic plants by northern hybridizations. The phenotype of transformed plants from the T1 generation was analyzed and we observed an increased branching of inflorescences in tobacco and canola plants expressing the *ipt* gene. Comparing with controls, the average number of capsules and siliques in AT2S1-*ipt* plants was 82.6 and 24.8% higher, resp. This result was correlated with an increase in cytokinin levels in transgenic plants, as revealed by RIA. Indeed, cytokinin contents of T1 AT2S1-*ipt* *B. napus* seeds were found 2.2-fold higher than cytokinin contents of control seeds, and T1 AT2S1-*ipt* *N. tabacum* capsules contained 2.6-fold more cytokinins than control capsules. In tobacco, the average seed weight per capsule was lower in AT2S1-*ipt* plants while the seed number per silique and the average seed weight were not modified in canola carrying this construct. The average yield per plant was not significantly increased in AT2S1-*ipt* tobacco or canola plants.

=> d 22 so

L6 ANSWER 22 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 7

SO Transgenic Research (1997), 6(2), 133-141
CODEN: TRSEES; ISSN: 0962-8819

=> d 30 ab

L6 ANSWER 30 OF 30 CAPLUS COPYRIGHT 2005 ACS on STN

AB Transgenic plants are used to manufacture biol. active peptides. The plants are regenerated from recombinant plant cells which have been transformed with a chimeric gene under the control of a **seed-specific promoter**. The gene encodes a modified seed storage protein which contains the desired peptide in a nonessential region. The peptide is produced by cleaving the hybrid seed storage protein and isolating the released peptide. Thus, a chimeric gene comprising the soybean lectin **promoter** and signal sequence fused to a Brazil nut (*Bertholletia excelsa*) 2S-albumin seed storage protein gene was constructed. Part of the sequence encoding the hypervariable region of the storage protein was replaced with DNA encoding Leu-enkephalin flanked by lysine residues. This chimeric gene was transferred to tobacco cells, and tobacco plants were regenerated from these transformants by standard procedures. Seeds of the plant were collected, the seed storage protein **isolated**, and the Leu-enkephalin released from the protein by digestion with endolysin-C and carboxypeptidase B.

=> s ((ohlrogge, j?) or (ohlrogge j?))/au
L7 478 ((OHLROGGE, J?) OR (OHLROGGE J?))/AU

=> s l7 and promoter
L8 28 L7 AND PROMOTER

=> s l8 and seed
L9 16 L8 AND SEED

=> dup rem l9
PROCESSING COMPLETED FOR L9
L10 7 DUP REM L9 (9 DUPLICATES REMOVED)

=> d 1-7 ti

L10 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
TI Sequences of twelve Arabidopsis thaliana seed specific promoters
and uses in expression of protein of interest in seeds

L10 ANSWER 2 OF 7 AGRICOLA Compiled and distributed by the National
Agricultural Library of the Department of Agriculture of the United States
of America. It contains copyrighted materials. All rights reserved.
(2005) on STN DUPLICATE 1

TI Both antisense and sense expression of biotin carboxyl carrier protein
isoform 2 inactivates the plastid acetyl-coenzyme A carboxylase in
Arabidopsis thaliana.

L10 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2
TI Accumulation of palmitate in Arabidopsis mediated by the acyl-acyl carrier
protein thioesterase FATB1

L10 ANSWER 4 OF 7 AGRICOLA Compiled and distributed by the National
Agricultural Library of the Department of Agriculture of the United States
of America. It contains copyrighted materials. All rights reserved.
(2005) on STN DUPLICATE 3

TI Targeting of the Arabidopsis homomeric acetyl-coenzyme A carboxylase to
plastids of rapeseeds.

L10 ANSWER 5 OF 7 AGRICOLA Compiled and distributed by the National
Agricultural Library of the Department of Agriculture of the United States
of America. It contains copyrighted materials. All rights reserved.
(2005) on STN DUPLICATE 4

TI Medium-chain fatty acid biosynthesis and utilization in Brassica napus
plants expressing lauroyl-acyl carrier protein thioesterase.

L10 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
TI Manufacture of petroselinic acid and ω -12 hexadecenoic acid in
transgenic plants expressing the ω -12 desaturase gene of coriander

L10 ANSWER 7 OF 7 AGRICOLA Compiled and distributed by the National
Agricultural Library of the Department of Agriculture of the United States
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(2005) on STN DUPLICATE 5

TI Expression of a coriander desaturase results in petroselinic acid
production in transgenic tobacco.

=> d so

L10 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
SO U.S. Pat. Appl. Publ., 57 pp.
CODEN: USXXCO

=> d pi

L10 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN
PATENT NO. KIND DATE APPLICATION NO. DATE

PI	US 2003005485	A1	20030102	US 2001-998059	20011130
	CA 2430642	AA	20030220	CA 2001-2430642	20011130
	WO 2003014347	A2	20030220	WO 2001-US44899	20011130
	WO 2003014347	A3	20030918		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW

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=> d 2 ab

L10 ANSWER 2 OF 7 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN DUPLICATE 1

AB To further characterize the role of biotin carboxyl carrier protein isoform 2 (BCCP2) in acetyl-coenzyme A carboxylase (ACCase) function and fatty acid biosynthesis, plants with reduced or increased expression of this protein were characterized. Analysis of 38 independent Arabidopsis lines expressing antisense BCCP2 transcript behind a constitutive promoter showed no significant phenotype, though antisense transcript was highly expressed. In developing seed, BCCP2 protein was reduced by an average of 38% resulting in a 9% average decrease in fatty acid content in mature seed. Over-expression of BCCP2 behind a seed-specific napin promoter increased the amount of holo-BCCP2 in developing seed by an average of twofold, as determined with anti-biotin antibodies. Surprisingly, the average fatty acid content of T2 seed from over-expression lines was 23% lower than wild-type seed. These plants also exhibited reduced seed setting in 18 of 20 T1 lines which was coincident with increased individual seed mass. Quantification of total BCCP2 in developing siliques using anti-BCCP2 antibodies indicated that as much as 60% of total plastidial BCCP2 was in the non-biotinylated form (apo-BCCP2). Although apo-BCCP2 was highly over-expressed in developing seed, accumulation of other ACCase subunits was unaffected. The specific activity of ACCase was up to 65% lower in developing seed of over-expression lines versus wild type. This was attributed to the assembly of biologically inactive (non-biotinylated) ACCase complexes. Consistent with ACCase exerting control over de novo fatty acid synthesis, reduced activity in developing seed resulted in lower oil content, altered fatty acid composition and reduced seed setting.

=> d 2 so

L10 ANSWER 2 OF 7 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN DUPLICATE 1

SO The Plant journal : for cell and molecular biology, Nov 2002. Vol. 32, No. 4. p. 419-431
Publisher: Oxford : Blackwell Sciences Ltd.
ISSN: 0960-7412

=> s ((benning c?) or (benning, c))/au

L11 269 ((BENNING C?) OR (BENNING, C))/AU

=> s l11 and seed

L12 50 L11 AND SEED

=> s l12 and promoter
L13 4 L12 AND PROMOTER

=> dup rem l13
PROCESSING COMPLETED FOR L13
L14 3 DUP REM L13 (1 DUPLICATE REMOVED)

=> d 1-3 ti

L14 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1
TI WRINKLED1 encodes an AP2/EREB domain protein involved in the control of storage compound biosynthesis in Arabidopsis

L14 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
TI Sequences of twelve Arabidopsis thaliana seed specific promoters and uses in expression of protein of interest in seeds

L14 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
TI Lipid metabolism regulators in plants

=> d so

L14 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1
SO Plant Journal (2004), 40(4), 575-585
CODEN: PLJUED; ISSN: 0960-7412

=> d 3 ab

L14 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
AB The present invention is directed to novel nucleic acid and amino acid sequences associated with the metabolism of seed storage compds. in plants. A novel discovery described herein lies in the identification of the nucleic acid sequences that encode the wril genetic locus in Arabidopsis thaliana, and lipid metabolism regulator (LMR) polynucleotide sequences contained therein. Preferably, the seed storage compds. are lipids, fatty acids, starches or seed storage proteins.

=> d 3 so

L14 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
SO PCT Int. Appl., 72 pp.
CODEN: PIXXD2

=> d 3 pi

L14 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002072775	A2	20020919	WO 2002-US7441	20020308
WO 2002072775	A3	20031218		
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RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2440330	AA	20020919	CA 2002-2440330	20020308
US 2003097685	A1	20030522	US 2002-94458	20020308
EP 1390381	A2	20040225	EP 2002-723399	20020308

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

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L15 4516 ((GAO H?) OR (GAO, H?))/AU

=> s l15 and seed
L16 28 L15 AND SEED

=> s l16 and promoter
L17 1 L16 AND PROMOTER

=> d ti

L17 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN
TI Sequences of twelve Arabidopsis thaliana seed specific promoters
and uses in expression of protein of interest in seeds

=> s ((girke t?) or (girke, t?))/au
L18 50 ((GIRKE T?) OR (GIRKE, T?))/AU

=> s l18 and seed
L19 0 L18 AND SEED

=> s l18 and seed
L20 20 L18 AND SEED

=> s l20 and promoter
L21 1 L20 AND PROMOTER

=> d ti

L21 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN
TI Sequences of twelve Arabidopsis thaliana seed specific promoters
and uses in expression of protein of interest in seeds

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L22 14555 ((WHITE J?) OR (WHITE, J?))/AU

=> s l22 and seed
L23 197 L22 AND SEED

=> s l23 and promoter
L24 1 L23 AND PROMOTER

=> d ti

L24 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN
TI Sequences of twelve Arabidopsis thaliana seed specific promoters
and uses in expression of protein of interest in seeds

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<input type="checkbox"/>	L1	seed-specific or seed-preferred	1571

END OF SEARCH HISTORY